

REMARKS

By this amendment Applicants have amended the specification at page 1 to correct an obvious typographical error -- changing "steaming" to "streaming."

The Examiner maintains the rejection of claims 1-15 under 35 U.S.C. 103(a) as being unpatentable over Zhu et al ("Zhu") in view of Wolf et al ("Wolf"). As indicated previously, Zhu discloses a system that packetizes (server 502) a multimedia bit stream for transmission over a packet network 504 to a remote site (multimedia player 506). The remote site includes a quality of service (QoS) manager 306 that detects lost packets and provides a retransmission request and/or a rate control message via a feedback message generator 314 to the server over a reverse channel of the network to retransmit such lost packets. Based on the retransmission requests and/or rate control message the server may adjust the streaming rate and number of copies for retransmission to optimize end-to-end QoS. Zhu does not reconstruct at a measurement site the packetized streaming media as received at the remote site from the retransmission requests and/or rate control messages for QoS analysis.

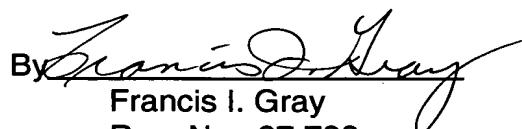
Zhu provides from a multimedia bit stream, comparable to the output of Applicant's encoder 14, a packetized transmission stream from a server, comparable to Applicant's server 16. The packets are received at a client or receiver 20 and processed to produce feedback messages, comparable to the signal from Applicant's TCP/IP reference server 32. However Zhu sends retransmission requests and/or rate control messages and not packet timing and/or missing packet information as does Applicant, i.e., Applicant does not send retransmission requests or rate control messages since Applicant is concerned with measuring picture quality rather than assuring that all the packets are transmitted as in Zhu. The Zhu messages are used to retransmit packets and/or to adjust the bit rate at the server. Applicant in contradistinction uses the packet timing and missing packet information to recreate the packetized streaming media as received by the client/remote site. Zhu neither teaches nor suggest recreating the received packetized streaming media from such information, i.e., Zhu has nothing comparable to Applicant's reception emulator 30. So far the Examiner appears to have ignored this explicit language in claim 1.

Wolf provides a video quality measurement system that processes baseband video from a source and baseband video from a destination, and determines a picture quality metric from the two results. This is comparable to the quality analyzer 28 of Applicant that receives a reference video (source video) and test video (destination video) to determine a picture quality metric. However Wolf does not provide the missing element of recreating the client or remote site packetized media stream from the information provided by the analysis of the packetized media stream at the remote site. Where in Zhu is the baseband video from the remote site provided? It doesn't exist, so there is no way that Wolf can be combined logically with Zhu to produce the invention as recited by Applicant. Zhu does not provide at one location both the source and destination video in either packetized or baseband format. Thus independent claims 1, 9 and 11, which recite "reconstructing . . . the packetized streaming media received at the remote site" or "receiver emulator . . . having as an output a reconstructed packetized streaming media that resembles the packetized streaming media received at the remote site", and claims 1-8, 10 and 12-15 dependent therefrom are deemed to be allowable as being nonobvious to one of ordinary skill in the art over Zhu in view of Wolf.

In view of the foregoing amendment and remarks entry of this amendment and allowance of claims 1-15 are urged, and such action and the issuance of this case are requested. Should the Examiner maintain the rejection of these claims, entry of this amendment is requested as placing the case in better form for appeal by correcting an obvious typographical error.

Respectfully submitted,

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